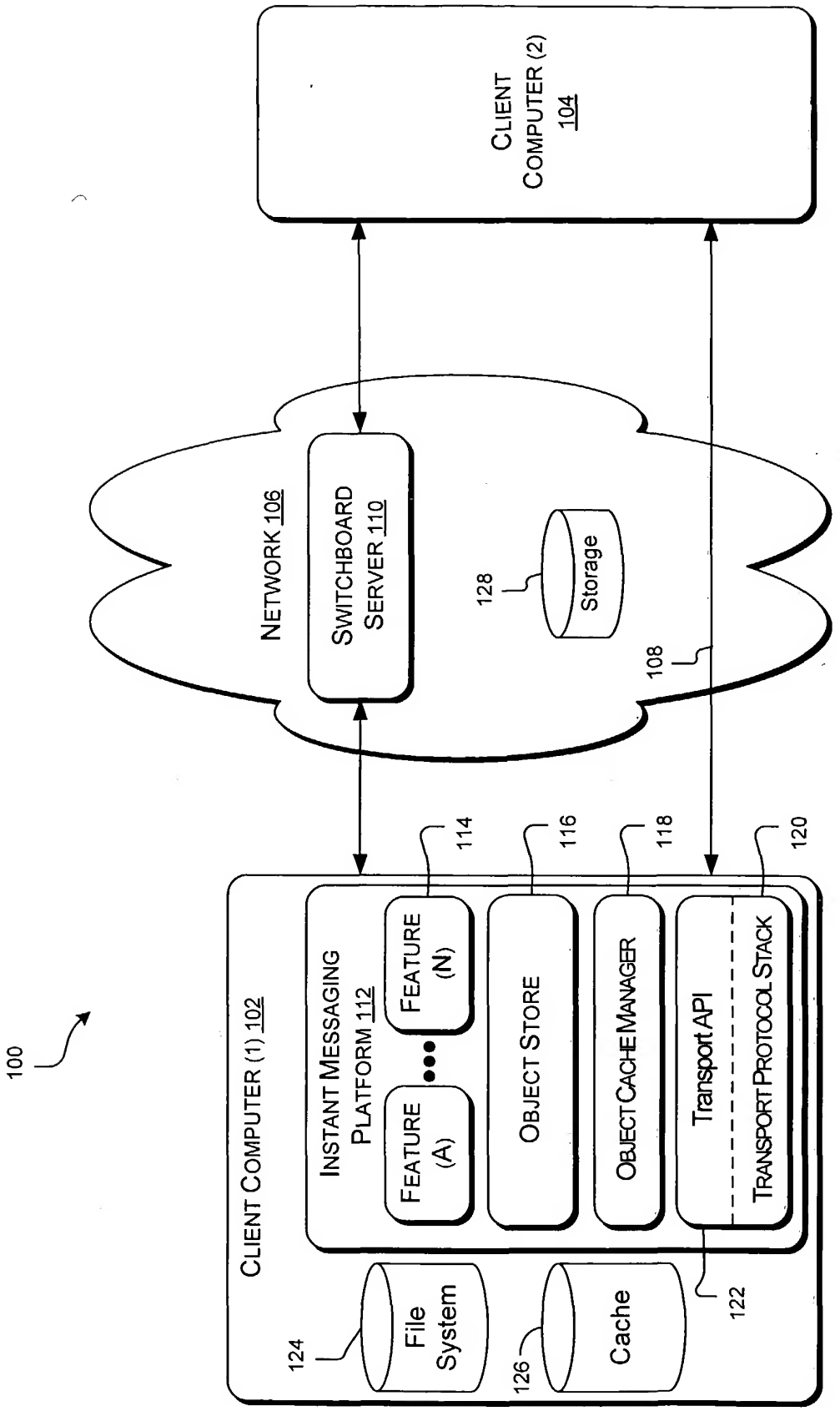
100
CLIENT COMPUTER (1) 102
INSTANT MESSAGING PLATFORM 112
FEATURE (A)
FEATURE (N)
OBJECT STORE
OBJECT CACHE MANAGER
Transport API
TRANSPORT PROTOCOL STACK
114
116
118
120
122
File System
124
Cache
126
NETWORK 106
SWITCHBOARD SERVER 110
128
Storage
108
CLIENT COMPUTER (2) 104

Fig. 1

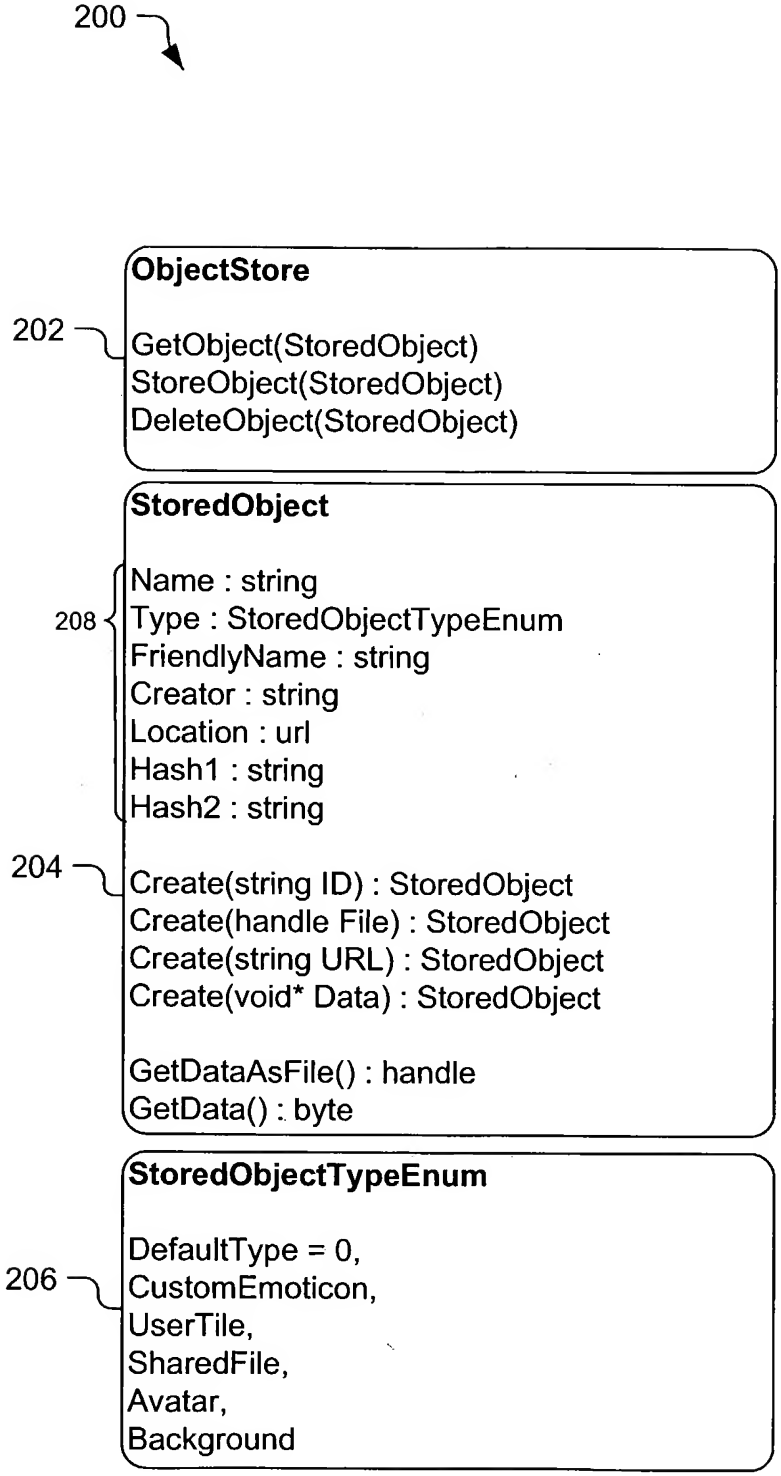
200
ObjectStore
202
GetObject(StoredObject)
StoreObject(StoredObject)
DeleteObject(StoredObject)
StoredObject
208
Name : string
Type : StoredObjectTypeEnum
FriendlyName : string
Creator : string
Location : url
Hash1 : string
Hash2 : string
204
Create(string ID) : StoredObject
Create(handle File) : StoredObject
Create(string URL) : StoredObject
Create(void* Data) : StoredObject
GetDataAsFile() : handle
GetData() : byte
StoredObjectTypeEnum
206
DefaultType = 0,
CustomEmoticon,
UserTile,
SharedFile,
Avatar,
Background

FIG. 2

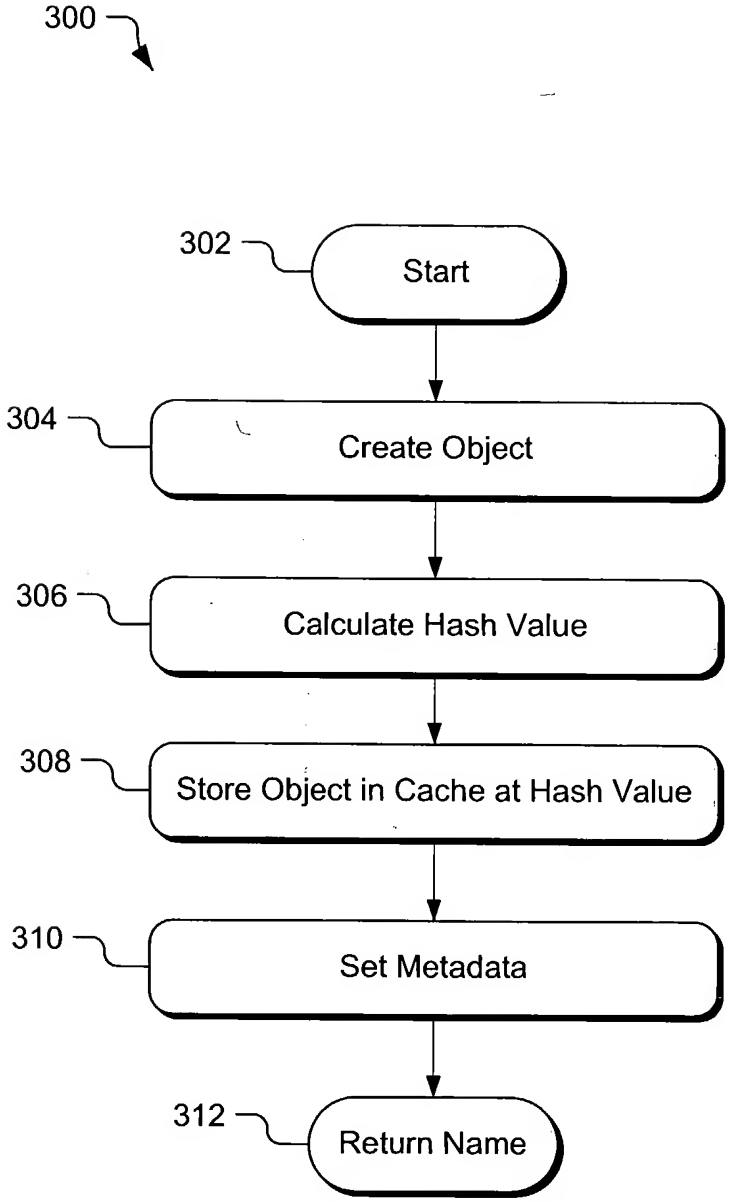
300
302
Start
304
Create Object
306
Calculate Hash Value
308
Store Object in Cache at Hash Value
310
Set Metadata
312
Return Name

FIG. 3

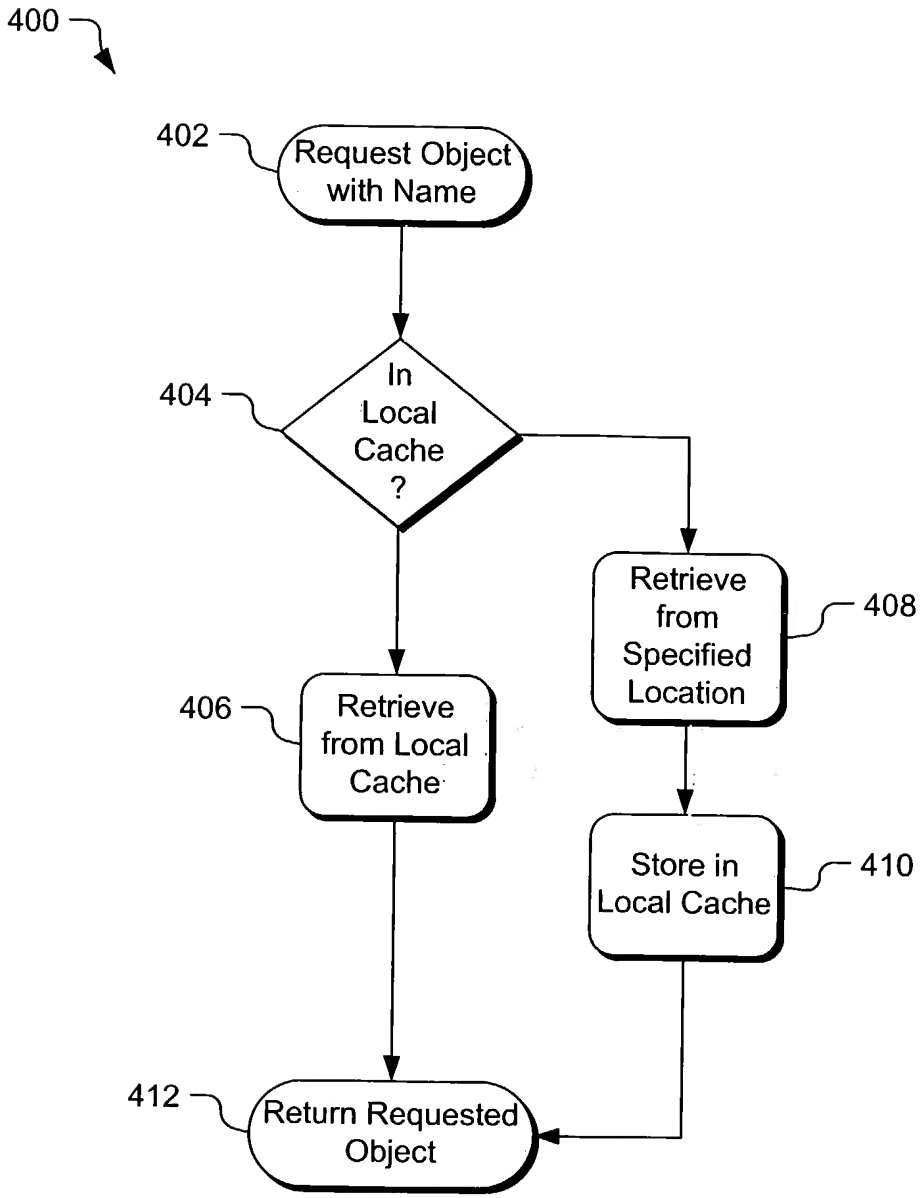
400
402
Request Object with Name
404
In Local Cache ?
406
Retrieve from Local Cache
408
Retrieve from Specified Location
410
Store in Local Cache
412
Return Requested Object

FIG. 4

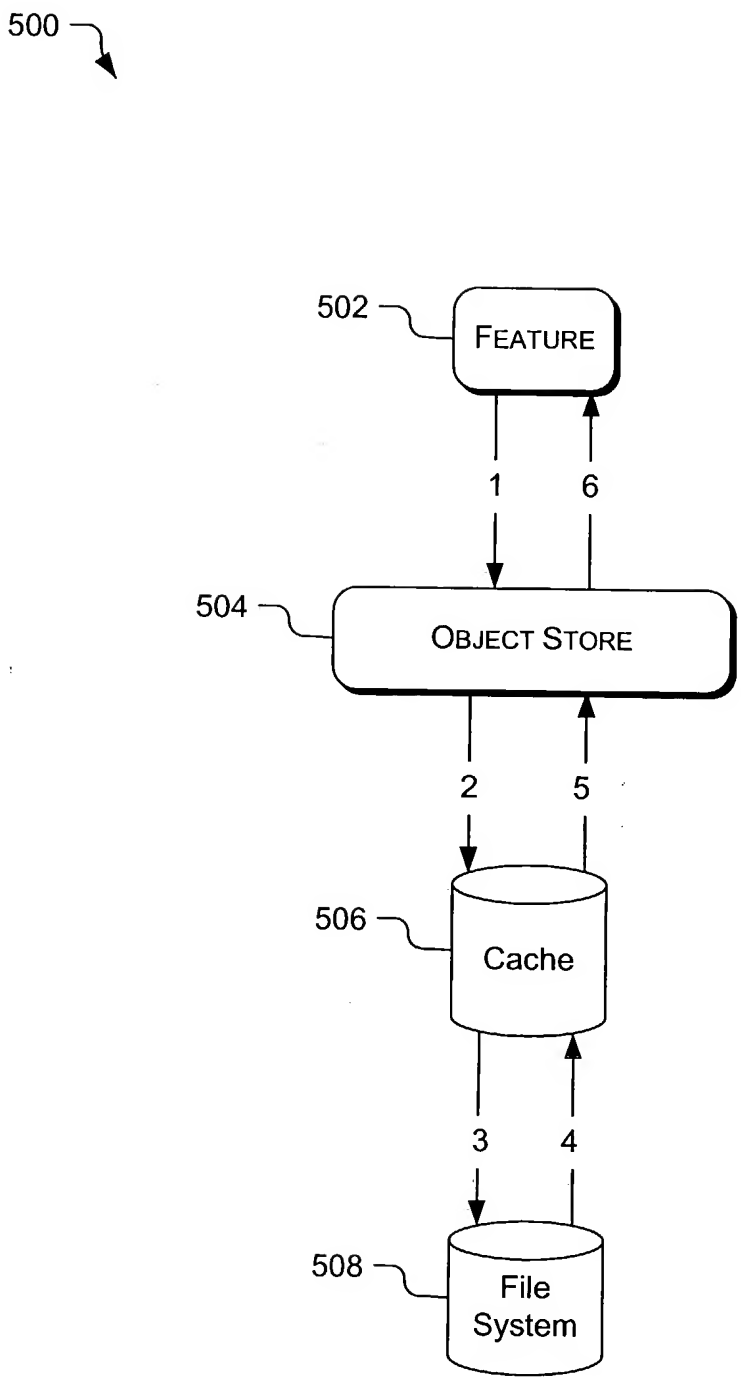
500
502
FEATURE
1
6
504
OBJECT STORE
2
5
506
Cache
3
4
508
File System

FIG. 5

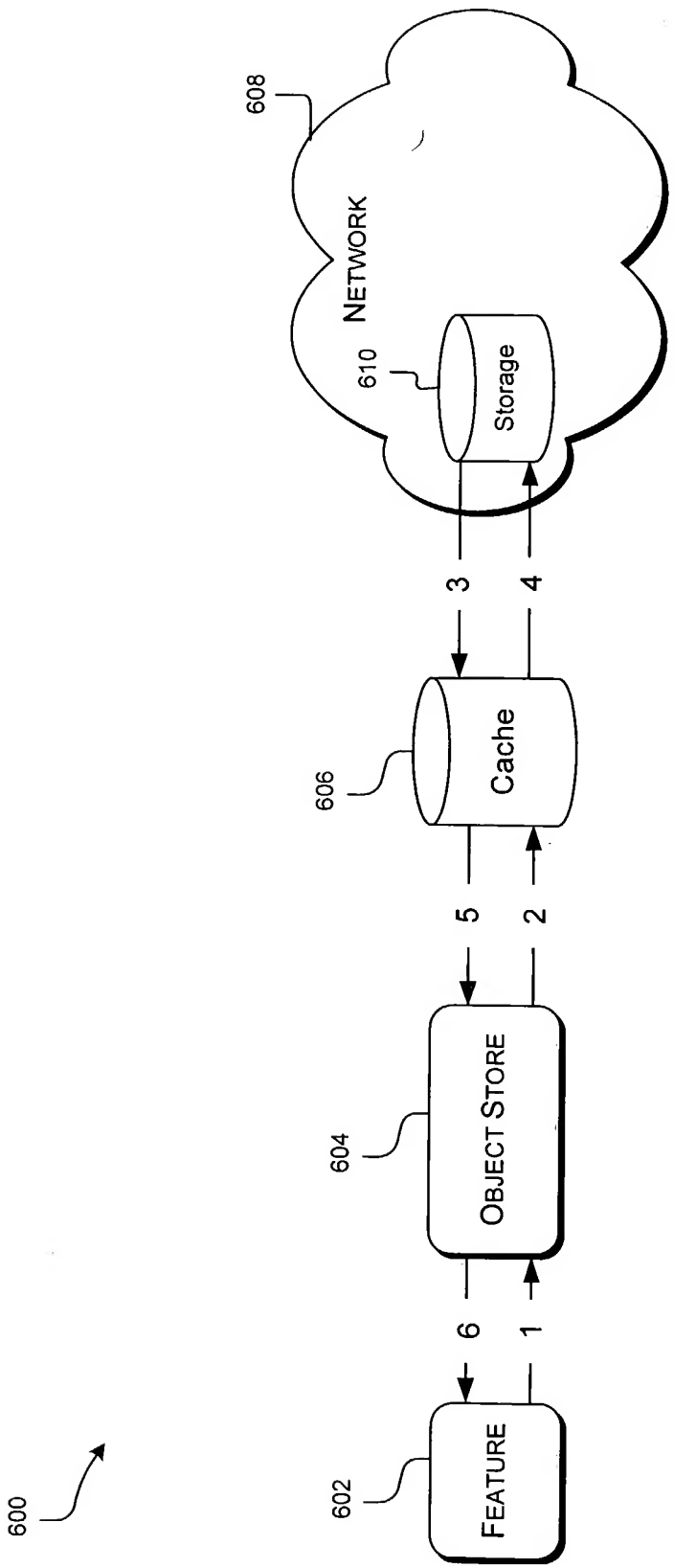
600
602
FEATURE
604
OBJECT STORE
606
Cache
608
NETWORK
610
Storage
1
2
3
4
5
6

Fig. 6

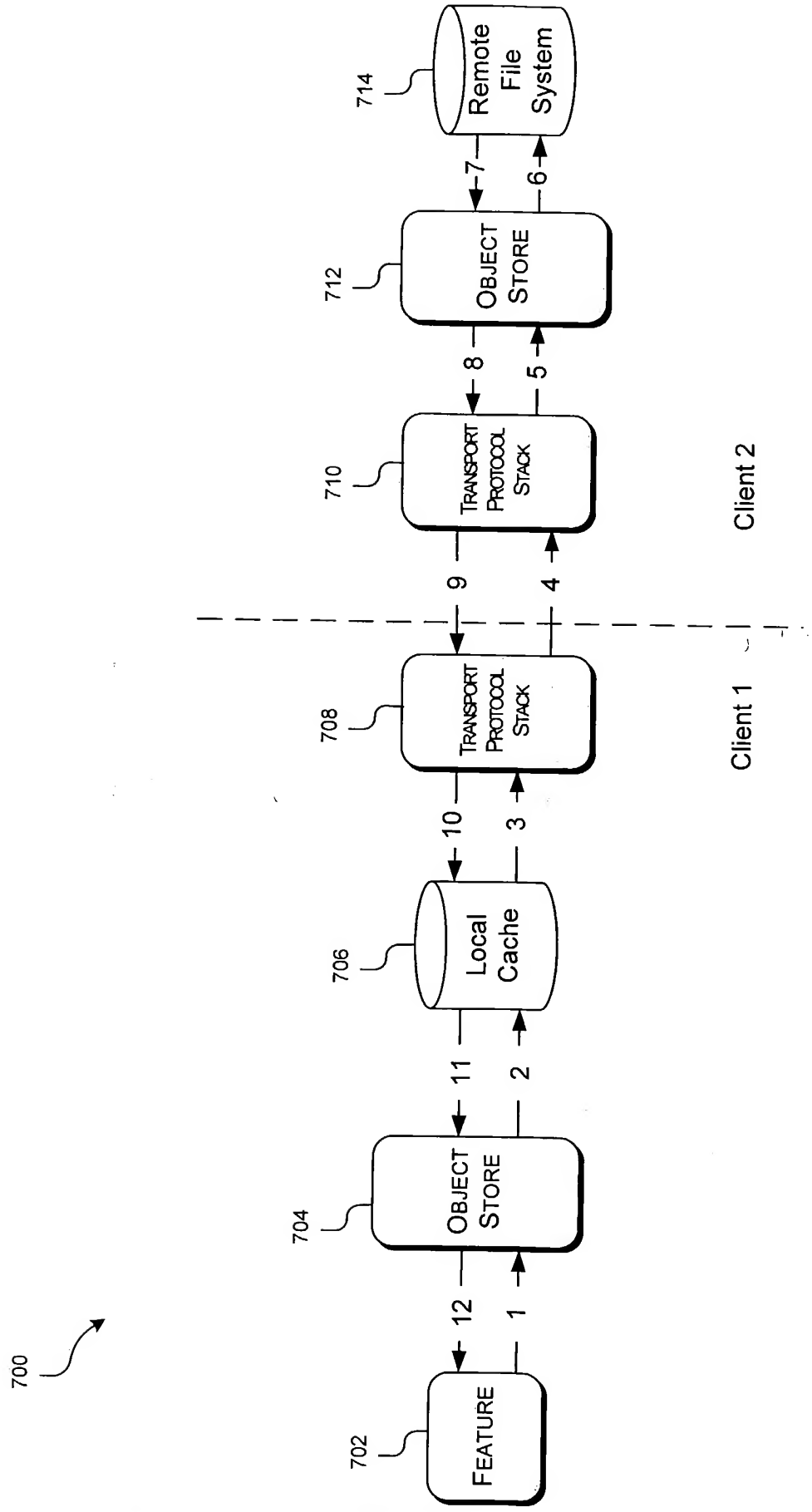
700
FEATURE
702
OBJECT STORE
704
Local Cache
706
TRANSPORT PROTOCOL STACK
708
TRANSPORT PROTOCOL STACK
710
OBJECT STORE
712
Remote File System
714
1
2
3
4
5
6
7
8
9
10
11
12
Client 1
Client 2

Fig. 7

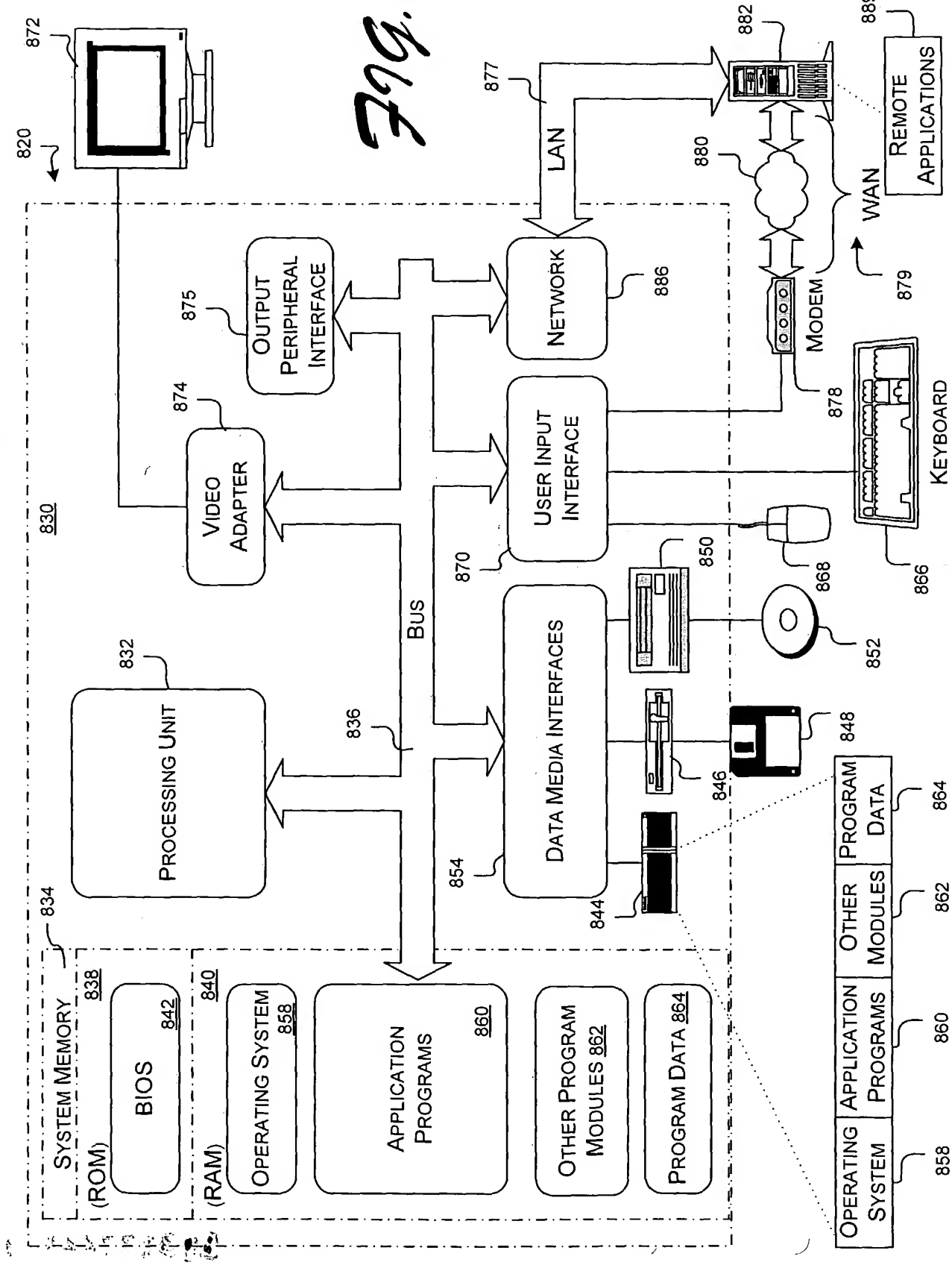
820
872
830
832
PROCESSING UNIT
834
SYSTEM MEMORY
838
(ROM)
BIOS
842
840
(RAM)
OPERATING SYSTEM
858
APPLICATION PROGRAMS
860
OTHER PROGRAM MODULES 862
PROGRAM DATA 864
836
BUS
VIDEO ADAPTER
874
OUTPUT PERIPHERAL INTERFACE
875
USER INPUT INTERFACE
870
NETWORK
886
DATA MEDIA INTERFACES
854
844
846
848
850
852
868
866
KEYBOARD
878
MODEM
879
880
WAN
877
LAN
882
REMOTE APPLICATIONS
889
OPERATING SYSTEM
858
APPLICATION PROGRAMS
860
OTHER MODULES
862
PROGRAM DATA
864

Fig. 8